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ABSTRACT

In the Creative and Academic Thinking Skills (CATS) Program, teachers who have been trained in developing higher-order and creative thinking skills go into early elementary classrooms to present lessons and provide followup activities. CATS integrates "gifted" materials and strategies into normal classroom activities. CATS lessons and teaching strategies focus on these cognitive processes: attribute finding, classification skills, problem solving, qualification skills, logical thinking, creative thinking, scientific process, analysis, and communication. Program benefits include: opportunities for students to develop higher-order and creative thinking skills; student exposure to energetic, highly motivated supplementary teachers; modeling of effective teaching of higher-order thinking skills; modeling of strategies for teaching creative thinking; better identification of those gifted/talented students who might qualify for future "pull-out" programs; etc. (JDD)

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THE FUTURE IS

THE CREATIVE & ACADEMIC THINKING SKILLS PROGRAM

RICHARDSON INDEPENDENT SCHOOL DISTRICT

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REACH

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The Challenge

This program was created partly in response to the difficulty of identifying young children who could qualify for and sustain participation in gifted and talented programs. Because these younger students are less highly developed in abstract thinking than older elementary students, it was easy to inappropriately identify participants—missing some gifted children and placing others in a program in which they could not succeed. Students who were mistakenly placed in these programs experienced frustration and failure since they were unable to keep up with their peers while others who would benefit from such a program were sometimes missed.

In addition, the question was raised about the viability of developing higher-order and creative thinking skills in <u>all</u> young learners—not just a special few. Why were these cognitive abilities considered any less essential or necessary than the "basic" skills? Was it possible to teach children in such a way that they could say with confidence, "I think for myself, I take care of myself, and I trust in myself"?

Finally, there was the challenge to encourage the use and development of strategies and methods for improving academic, creative, and higher-order thinking skills by all classroom teachers.

Innovations

The most striking feature of this program is that it "pulls in", rather than "pulls out". Instead of taking children out of the regular classroom, it sends these special teachers into the classroom. Both the learning centers that are left by the CATS teachers, and the model they provide increase the focus on higher-order and creative learning activities. With CATS, an integration of "gifted" materials and strategies into normal classroom activities is achieved.

CATS is unique in offering every child in the early elementary grades exposure to the teachers, methods, and material normally offered only to students identified as gifted and talented. It provides an opportunity to maximize the potential academic and creative abilities of all students in their early years in school.

Finally, the long-term observation of young students engaged in "gifted" learning activities makes it possible to more accurately identify participants for future gifted and talented programs.

The CATS Program has accomplished its goals. It has grown from one teacher visiting only third grade classrooms to four full-time teachers visiting every first through third grade classroom in the district with plans to expand to kindergarten. The program benefits include:

- modeling of effective teaching of higher-order thinking skills
- modeling strategies for teaching creative thinking
- on-going training for teachers
- engaging activities that remain in the classroom that are updated regularly
- opportunities for classroom teachers to observe the learning patterns of their students
- opportunities for all lower elementary students to develop higher-order and creative thinking skills
- student exposure to energetic, highly motivated supplementary teachers
- enhanced student self-esteem
- opportunities for students to receive a highly stimulating and enjoyable learning experience
- better identification of those gifted and talented students who might qualify for future "pull out" programs
- a cadre of highly skilled teachers that work together

Cost

The CATS program is remarkably inexpensive for what it offers. The total cost to the Richardson Independent School District, not including CATS teachers salaries, is $29,000--an average expense of $10 per student annually.

Curriculum Focus

As with other district programs for the gifted, CATS covers a broad range of thinking and academic skills. In particular the CATS program lessons and teaching strategies focus on these cognitive processes:

- attribute finding—the identification of characteristics and the attachment of labels identifying them
- classification skills—sorting things into groups according to common qualities
- problem solving—a five-step process as described by Dr. Sidney Parnes and Dr. Alex Osborn that moves from describing the process to identifying possible problem solutions
- qualification skills—identifying and describing how things are alike and different
- logical thinking—the ability to think in a systematic, step-by-step manner, in which connections are built between each step
- creative thinking—develops fluency, flexibility, and encourages originality in thinking and performing learning tasks
- scientific process—teaches students the steps used in the scientific process—stating a hypothesis, testing the hypothesis, and analyzing results—and provides tasks using that process
- analysis — involves breaking both structures and operations down into parts, identifying order and connections where they exist
- communication—the ability to clearly describe thinking or reasoning in a way that is easily understood by others

Any combination of these higher-order thinking strategies may be combined or used in a CATS lesson. In addition to developing the processes, there is teaching of the cognitive processes as well. Students become aware of their thinking processes, and identify what process they are using for particular learning tasks. Students are not only being challenged to think, they are challenged to understand their thinking and their learning.

References

Baker, Samm S. (1982) Your Key to Creative Thinking: How to Get More and Better Ideas. New York: Bantam.

Block, N.J. (1976) The IQ Controversy. New York: Panteon.

Fearn, Leif. (1976) 42 Ways to Have Fun with My Mind. San Diego: Kabyn Books.

Guildford, J.P. (1977) Way Beyond IQ. Buffalo, New York: Creative Education Foundation.

Hopkins, Lee Bennett. (1969) Creative Activities for the Gifted Child. Belmont, California: David S. Lake Publishers.

Kosinki, Leonard V. Readings on Creativity and Imagination in Literature and Language, National Council of Teachers of English.

Piaget, Jean. (1963) The Origins of Intelligence in Children. New York: Norton.

Whimbey, Arthur. (1975) Intelligence Can Be Taught. New York: Dutton.

This document describes the Creative and Academic Thinking Skills (CATS) Program. This program has been selected by the Texas Education Agency as one in a series of six exemplary educational programs. Like all of the programs in this series, the CATS program addresses a basic educational need in an innovative and effective way.

THE CREATIVE & ACADEMIC THINKING SKILLS PROGRAM

The Vision

Over the past ten years, the Richardson Independent School District has placed heavy emphasis on programs for children identified as gifted and talented. CATS is one part of a comprehensive program and focuses on children in the lower elementary grades, one through three. Through CATS, a small group of specially selected teachers, trained in developing higher-order and creative thinking skills, are sent into every early elementary classroom of each school in the district on a regular basis. The CATS teachers present lessons challenging students to use higher-order cognitive processes and creative thinking, and they provide follow-up activities that remain in the classrooms they have visited. These itinerant teachers expose all students to lessons and strategies formerly slated only for exceptional learners. They also serve as teaching models for the classroom teachers, helping both the classroom teacher and the district to identify those students potentially eligible for gifted and talented programs offered in higher grades.

CATS teachers are selected not only for their knowledge and skill in developing higher-order and creative thinking skills, but also for their enthusiasm and energy in teaching. Along with their masters and doctoral degrees in education, these teachers are highly articulate and able to enter another teacher's territory in an engaging way. This cadre of specialized teachers meet for collaborative planning twice a week to develop lessons that they teach in the classrooms as well as those which are left in the classroom for the students. Lessons spiral up through the grades, rather than being one-shot efforts aimed at a particular skill or content area. The teaching strategies are strongly research-based.

In the CATS program, there is a clear focus on making students independent learners enabling them to think critically and to communicate how and what they think. Students are asked not just to give answers, but to explain how they derived that answer. They learn from their peers, as well as from the CATS teachers, and activities frequently involve student teamwork. The program seeks to teach children how to think, with the belief that once that has been accomplished, they can learn facts on their own.

At the same time that students are engaged in well developed and highly creative learning experiences, the classroom teacher observes demonstrated methods and strategies that are effective in developing cognitive abilities. The classroom teachers observe an enthusiasm for teaching and learning that is contagious. Initial concerns about losing regular instructional time disappear as classroom teachers discover that their students' learning experience is greatly enriched, and that the CATS lessons provide a dimension of learning not normally reached.

Small wonder that children have been known to applaud at the end of a CATS lesson.

REACH

Vol. II, Part 2

Exemplary Program Practices Series

The Creative and Academic Thinking Skills Program is one of six programs highlighted in REACH, Vol. II, Parts 1-6. A training package for each of the six identified programs has been developed and can be requested through the Educational Service Centers. Training package includes: brochure, videotapes, videoguides, workshop outlines, fact sheets, and implementation guides on each of the six practices.

This REACH document is a publication of the Texas Education Agency, Division of Exemplary Programs. The Division's objective is to identify and disseminate information on exemplary and/or innovative school practices throughout Texas. The production and dissemination of this REACH document and associated training materials were conducted by NuStats, Inc. of Austin under the Exemplary Program Practices series contract to TEA. For additional copies of REACH Vol. II, Parts 1-6, please contact Publications Distribution, Texas Education Agency, 1701 N. Congress Ave., Austin, Texas, 78701-1494 in writing. The cost is $1.00 per copy.